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Presentation Title: Use of Shuttle RADAR Topography Mission Data to Produce an Active Tectonics Map for South Asia

Abstract: A seismic hazards mapping project has been proposed by international seismologists and geologists working together in South Asia as part of a UNESCO/USDOE coordinated group. Representatives from science agencies in Pakistan, India, China, Nepal, Sri Lanka, Iran, and Bangladesh have agreed to provide structural and seismic data, which will be integrated into an active tectonics map of South Asia with assistance from the U.S. Geological Survey. The most suitable base layer for such a map is a moderate resolution topographic shaded relief image. Shuttle RADAR Topography Mission (SRTM) data were selected as the best available data source for this project because of its spatial resolution, uniformity, and availability throughout the South Asia region. In addition to being the base map layer for the final map product, the shaded relief imagery will be used by various country participants to digitize, register, and modify their existing seismic information. Finished SRTM data have been obtained from the National Center for Earth Resources Observations and Science and processed to create the shaded relief digital image needed by the participating countries. Void areas were filled with GTOPO30 30 arc second elevation data. A 3 by 3 low pass filter was used to decrease the visual effect of the GTOPO30 patches. Both elevation data and shaded relief images will be subdivided into sub-regions and distributed on CD-ROM to each participant for their use in data preparation.